

CLAIMS

What is claimed is:

1. A method for providing area chat rooms where unspecified users each carrying a portable terminal can exchange character information or the like in real time, the method comprising the steps of:

managing access to area chat rooms each associated with a specific location;

accepting an entrance request, with the current location of the terminal or a user-specified location attached, from said terminal for permission to enter one of said area chat rooms, and allowing entrance into any appropriate area chat room whose area includes said current location or specified location;

accepting a remark request, with the current location of the terminal attached, from said terminal for permission to make a remark, and delivering the remark to the terminals of the other participants of said area chat room by attaching the location of said terminal; and

accepting location update information from said terminal and delivering said location update information to the terminals of the other participants of said area chat room.

2. A method for providing area chat rooms according to claim 1, further comprising:

accepting any inquiry about the current location of another participant in the area chat room from said terminal, acquiring the current location from the terminal of said other

participant if the terminal of said other participant permits sending a reply, and sending the current location of said other participant in return.

3. A method for providing area chat rooms according to claim 1, further comprising:

creating an area chat room by specifying a range based on the current location of said terminal or a user-specified location if a request to create an area chat room is received from said terminal.

4. A method for providing area chat rooms according to claim 1, further comprising:

registering and managing information about any subscriber who wants to be notified if an area chat room whose area includes the current location of the terminal or a user-specified location is created; and

notifying said subscriber's terminal about creation of any area chat room which agrees with the information about said subscriber.

5. A terminal-side area chat processing method for use in a system which provides chat rooms where unspecified users each carrying a portable terminal can exchange character information or the like in real time, the method comprising the steps of:

sending a server of said system an entrance request with the current location of the terminal or a user-specified

location attached, requesting for permission to enter an area chat room provided by said system and associated with a specific location;

sending the server of said system a remark request, with the current location of said terminal attached, when the user is in said area chat room;

receiving the current locations and remarks of all the participants as well as map data corresponding to the range of said area chat room from said system and displaying said map data, charted locations of the participants, and remarks of the participants on a display screen of said terminal when the user is in said area chat room; and

informing the server of said system about the current location of said terminal at designated intervals or on designated occasions.

6. A terminal-side area chat processing method according to claim 5, wherein said entrance request contains direction whether or not the current location attached to said entrance request is to be shown to other participants.

7. A terminal-side area chat processing method according to claim 5, wherein the charted location of the latest speaker is indicated by a shape, color, or method different from those for other speakers when charting the locations of the participants who are in said area chat room.

8. A terminal-side area chat processing method according to claim 5, wherein the charted location of the local terminal is indicated by a shape, color, or method different from those for the other participants when charting the locations of the participants who are in said area chat room.

9. A terminal-side area chat processing method according to claim 5, further comprising:

retaining the time and location of each received remark, accepting a remark location search request to search for the location of a specific remark displayed on the display screen of said terminal, and charting the location where said remark was made, using a shape, color, or method different from those for the locations of the other participants.

10. A terminal-side area chat processing method according to claim 9, wherein, after accepting a remark location search request, calculating the distance between the location at the time of said remark and the current location of the terminal and displaying it on the display of said terminal.

11. A terminal-side area chat processing method according to claim 5, further comprising: sending said system a room creation request to create an area chat room with its range specified based on the current location of said terminal or a user-specified location.

12. A terminal-side area chat processing method according to claim 11, wherein said room creation request contains information to limit the participants who are allowed in the area chat room created.

13. A computer-readable medium for recording a processing program to provide area chat rooms where unspecified users each carrying a portable terminal can exchange character information or the like in real time, wherein the program causes a computer execute:

managing access to area chat rooms each associated with a specific location;

accepting an entrance request, with the current location of the terminal or a user-specified location attached, from said terminal for permission to enter one of said area chat rooms, and allowing entrance into any appropriate area chat room whose area includes said current location or specified location;

accepting a remark request, with the current location of the terminal attached, from said terminal for permission to make a remark, and delivering the remark to the terminals of the other participants of said area chat room by attaching the location of said terminal; and

accepting location update information from said terminal and delivering said location update information to the terminals of the other participants of said area chat room.

14. An apparatus for providing area chat rooms where unspecified users each carrying a portable terminal can exchange character information or the like in real time, the apparatus comprising:

room log-in management means for managing access to area chat rooms each associated with a specific location;

entrance processing means for accepting an entrance request, with the current location of the terminal or a user-specified location attached, from said terminal for permission to enter one of said area chat rooms, and allowing entrance into any appropriate area chat room whose area includes said current location or specified location;

remark accepting means for accepting a remark request, with the current location of the terminal attached, from said terminal for permission to make a remark, and delivering the remark to the terminals of the other participants of said area chat room by attaching the location of said terminal; and

location-update information delivery means for accepting location update information from said terminal and delivering said location update information to the terminals of the other participants of said area chat room.

15. An apparatus according to claim 14, further comprising:

current location inquiry processing means for accepting any inquiry about the current location of another participant in the area chat room from said terminal, acquiring the current location from the terminal of said other participant if the

terminal of said other participant permits sending a reply, and sending the current location of said other participant in return.

16. An apparatus according to claim 14, further comprising: room creation processing means for creating an area chat room by specifying a range based on the current location of said terminal or a user-specified location if a request to create an area chat room is received from said terminal.

17. An apparatus according to claim 14, further comprising: push subscription processing means for registering and managing information about any subscriber who wants to be notified if an area chat room whose area includes the current location of the terminal or a user-specified location is created; and

push notification processing means for notifying said subscriber's terminal about creation of any area chat room which agrees with the information about said subscriber.

18. A terminal-side apparatus for use in a system to provide area chat rooms, the system provides chat rooms where unspecified users each carrying a portable terminal can exchange character information or the like in real time, the apparatus comprising:

entrance processing means for sending a server of said system an entrance request with the current location of the terminal or a user-specified location attached, requesting

for permission to enter an area chat room provided by said system and associated with a specific location;

remark processing means for sending the server of said system a remark request, with the current location of said terminal attached, when the user is in said area chat room;

display processing means for receiving the current locations and remarks of all the participants as well as map data corresponding to the range of said area chat room from said system and displaying said map data, charted locations of the participants, and remarks of the participants on a display screen of said terminal when the user is in said area chat room; and

location information update processing means for informing the server of said system about the current location of said terminal at designated intervals or on designated occasions.

19. A terminal-side apparatus according to claim 18, wherein said entrance request contains direction whether or not the current location attached to said entrance request is to be shown to other participants.

20. A terminal-side apparatus according to claim 18, wherein the charted location of the latest speaker is indicated by a shape, color, or method different from those for other speakers when charting the locations of the participants who are in said area chat room.

21. A terminal-side apparatus according to claim 18, wherein the charted location of the local terminal is indicated by a shape, color, or method different from those for the other participants when charting the locations of the participants who are in said area chat room.

22. A terminal-side apparatus according to claim 18, further comprising:

    remark location search processing means for retaining the time and location of each received remark, accepting a remark location search request to search for the location of a specific remark displayed on the display screen of said terminal, and charting the location where said remark was made, using a shape, color, or method different from those for the locations of the other participants.

23. A terminal-side apparatus according to claim 22, wherein, after accepting a remark location search request, calculating the distance between the location at the time of said remark and the current location of the terminal and displaying it on the display of said terminal.

24. A terminal-side apparatus according to claim 18, further comprising:

    room creation request processing means for sending said system a room creation request to create an area chat room with its range specified based on the current location of said terminal or a user-specified location.

25. A terminal-side apparatus according to claim 24, wherein said room creation request contains information to limit the participants who are allowed in the area chat room created.